

**AMENDMENTS TO THE CLAIMS:**

1. (Currently Amended) A system for capturing high-speed motion, said system comprising:  
a video camera; an infrared strobe light; a circuit connected to said video camera and said infrared strobe light, said circuit configured to ~~fire~~ provide a pulse to said infrared strobe light as a result of receiving a signal from said video camera in order to fire said infrared strobe light, wherein the circuit is configured such that a width of the pulse is variable and is settable by a user.
2. (Original) A system as recited in claim 1, wherein said circuit is configured to fire said infrared strobe light as a result of receiving said signal from said video camera, after a delay period.
3. (Original) A system as recited in claim 2, wherein said circuit is configured such that said delay period is settable by a user.
4. (Original) A system as recited in claim 1, further comprising an infrared bandpass filter over a lens of said video camera.
5. (Original) A system as recited in claim 1, wherein said infrared strobe light comprises a light emitting diode (LED) strobe.

6. (Original) A system as recited in claim 1, further comprising a video recorder connected to said video camera.

7. (Original) A system as recited in claim 6, wherein the video recorder comprises a video cassette recorder.

8. (Original) A system as recited in claim 6, wherein said video recorder has the ability to play back in a single frame mode.

9. (Cancelled)

10. (Original) A system as recited in claim 1, wherein said circuit is configured to extract a vertical synchronization pulse from the signal received from said video camera and use said vertical synchronization pulse to provide a triggering signal to said infrared strobe light.

11. (Original) A system as recited in claim 10, wherein said circuit comprises a video input, a buffer phase shifter circuit connected to said video input, a clamp circuit connected to said buffer phase shifter circuit, a synchronization separator connected to said clamp circuit, a vertical pulse separator connected to said synchronization separator, a variable delay single shot circuit connected to said vertical pulse separator, a variable pulse width single shot circuit connected to

said variable delay single shot circuit, and a trigger output connected to said variable pulse width single shot circuit.

12. (Currently Amended) A method of using a system comprising a video camera, infrared strobe light, and a circuit to capture high-speed motion, said method comprising: connecting the video camera and the infrared strobe light to the circuit; powering the video camera, infrared strobe light and video camera; having the video camera provide a signal to the circuit; using the circuit to set a variable pulse width of a pulse provided to the infrared strobe light; and having the circuit fire provide the pulse to the infrared strobe light as a result of the circuit receiving the signal from the video camera in order to fire the infrared strobe light; and playing the video back.

13. (Original) A method as recited in claim 12, wherein the step of having the circuit fire the infrared strobe light comprises having the circuit wait through a delay period before firing the infrared strobe light.

14. (Original) A method as recited in claim 13, further comprising setting the delay period.

15. (Original) A method as recited in claim 12, further comprising employing an infrared bandpass filter over a lens of the video camera.

16. (Original) A method as recited in claim 12, further comprising connecting a video recorder to the video camera.

17. (Original) A method as recited in claim 12, further comprising connecting a video cassette recorder to the video camera.

18. (Cancelled)

19. (Original) A method as recited in claim 12, further comprising extracting a vertical synchronization pulse from the signal received from the video camera and using the vertical synchronization pulse to provide a triggering signal to the infrared strobe light.

20. (New) A system as recited in claim 1, wherein the circuit comprises a first manually-operable control for setting the pulse and a second manually-operable control for setting a delay.

21. (New) A method as recited in claim 12, further comprising setting a first manually-operable control of the circuit to set the pulse and setting a second manually-operable control of the circuit to set a delay.